

COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
South Central Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS

Old Virginia Brick Company
Mitchell Bell Road - Amherst County, Virginia
Permit No. SCRO30734

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Old Virginia Brick Company has applied for a Title V Operating Permit for its Madison Heights facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact:_____ Date:_____

Air Permit Manager:_____ Date:_____

Regional Director:_____ Date:_____

FACILITY INFORMATION

Permittee

Old Virginia Brick Company
P. O. Box 508
Salem, VA 24513

Facility

Old Virginia Brick Company – Madison Heights Plant
Mitchell Bell Road
Madison Height, VA

AIRS ID No. 51-009-00025

SOURCE DESCRIPTION

SIC Code: 3251 - Old Virginia Brick Company is a manufacturer of face brick, glazed brick, and special shapes covered by Standard Industrial Classification (SIC) Code 3251. The facility has the potential to operate twenty-four (24) hours per day, seven (7) days per week, fifty-two (52) weeks per year. The facility manufactures brick from raw clay and shale trucked into the facility. The facility is permitted to manufacture 74,000 tons of brick per year. The facility has a September 10, 1998 permit for the entire facility.

The facility is a Title V major source of hydrogen fluoride (a HAP). This source is located in an attainment area for all pollutants. The facility was previously permitted under a Minor NSR Permit, issued on January 27, 1988, and amended on May 29, 1998 and September 10, 1998.

COMPLIANCE STATUS

A full compliance evaluation of this facility, including a site visit, has been conducted. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following:

See Condition II.

EMISSIONS INVENTORY

A copy of the 2002 annual emission update is attached. Emissions are summarized in the following tables.

2002 Actual Emissions

	2002 Criteria Pollutant Emission in Tons/Year				
Emission Unit	VOC	CO	SO ₂	PM ₁₀	NO _x
Brick kiln and dryer		40.4	22.6	29.3	11.8
Sand Application				0	
Total		40.4	22.6	29.3	11.8

2002 Facility Hazardous Air Pollutant Emissions

Pollutant	2002 Hazardous Air Pollutant Emission in Tons/Yr
HF	12.5
HCl	5.7

EMISSION UNIT APPLICABLE REQUIREMENTS – (Brick Manufacturing)

Limitations

Condition III. A.1. contains the control requirements for the clay crushing, screening, and storage. This condition is taken from the NSR permit issued September 10, 1998.

Conditions III. A. 2.a. and b. contain the control requirements and visible emission limitation. These conditions are taken from the NSR permit issued September 10, 1998.

Condition III. A. 3. a. contains the emissions limitations. This condition is taken from the NSR permit issued September 10, 1998.

Conditions III. A.4.a, b, and c. contain the approved fuel, annual production limitation of 74,000 tons of brick per year, and the emissions limitations. These conditions are taken from the NSR permit issued September 10, 1998.

Condition III.A.4.d. contains the new source opacity limitation of 20% percent opacity, except for one six-minute average in any one hour of not more than 30% opacity.

Monitoring

Conditions III.B.1. and 2. Contain the opacity periodic monitoring. Monitoring of visible emissions will be required of the source (fabric filter stack 02 and kiln stack 03 and dryer stacks 04 and 05) at least one time per week, when the units are operating. They are to observe for the presence of visible emissions from the stack. If visible emissions are observed, the permittee will have the option to take timely corrective action to resume operations without visible emissions or perform a VEE in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions compliance. The permittee will keep a log of observations, any VEE recordings, and any corrective actions. If the unit has not operated during the week, this fact shall be noted in the log, and that the visible emission observation was not required.

Recordkeeping

Condition III. C. contains the recordkeeping requirements. These are taken from the NSR permit issued September 10, 1998. The permit includes requirements for maintaining records for annual brick production (in tons), calculated monthly as the sum of the most recent 12 months and for all monitoring and testing required by the permit.

Testing

Condition III. D. states that the permitted facility shall be constructed so as to allow emissions testing at any time, using appropriated methods. The permit does not require source tests. The Department and EPA has authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting

The only reporting that is required is in the General Conditions and that is stated below.

Streamlined Requirements

There are no streamlined requirements.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

Comments on General Conditions

B. Permit Expiration

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by §2.1-20.01:2 and §10.1-1185 of the *Code of Virginia*, and the “Department of Environmental Quality Agency Policy Statement NO. 3-2001”.

The general condition cites the entire Article(s) that follow:

B.2. Article 1 (9 VAC 5-80-50 et seq.), Part II of 9 VAC 5 Chapter 80. Federal Permits for Stationary Sources

B.3. Article 1 (9 VAC 5-80-50 et seq.), Part II of 9 VAC 5 Chapter 80. Federal Permits for Stationary Sources

The general conditions cites the sections that follow:

- B. 9 VAC 5-80-80. “Application”
- B.2. 9 VAC 5-80-150. “Action on Permit Applications”
- B.3. 9 VAC 5-80-80. “Application”
- B.4. 9 VAC 5-80-80. “Application”
- B.4. 9 VAC 5-80-140. “Permit Shield”
- B.5. 9 VAC 5-80-80. “Application”

F. Failure/Malfunction Reporting

Section 9 VAC 5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9 VAC 5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to section 9 VAC 5-20-180 including Title V facilities. Section 9 VAC 5-80-250 is from the Title V regulations. Title V facilities are subject to both sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within four daytime business hours of discovery of the malfunction.

U. Malfunction as an Affirmative Defense

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition U and General Condition F. For further explanation see the comments on general condition F.

This general condition cites the sections that follow:

9 VAC 5-20-180. Facility and Control Equipment Maintenance or Malfunction

9 VAC 5-80-110. Permit Content

STATE ONLY APPLICABLE REQUIREMENTS

There are no state only requirements.

FUTURE APPLICABLE REQUIREMENTS

There are no known future applicable requirements.

INAPPLICABLE REQUIREMENTS

Old Virginia Brick's tunnel kiln is subject to 40 CFR Part 63 Subpart JJJJ "National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing since the facility manufactures brick and has the potential to emit greater than 10 tons of HF per year (40 CFR 63.8380 a. and b). However, an existing tunnel kiln with a federally enforceable permit condition (permit dated September 10, 1998, Condition 7) that restricts the kiln operation to less than 10 tph of fired product on a 12-month rolling average is not subject to the requirements of this subpart per 40 CFR 63.8390 (d). Section 63.8515 Definitions define "Tunnel kiln design capacity means the maximum amount of brick, in Mg (tons) that a kiln is

designed to produce in one year divided by the number of hours in a year (8760)". The permitted capacity is 74,000 tons per year. The capacity is 8.4 (74,000 / 8760) tons per hour. Therefore, this kiln is not subject to the requirements of Subpart JJJJ.

COMPLIANCE PLAN

A compliance plan is not required. They are in compliance with the requirements of their permit.

INSIGNIFICANT EMISSION UNITS

No insignificant emissions units were identified.

CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

PUBLIC PARTICIPATION

The proposed permit will be place on public notice in the The News & Advance from November 20, 2003 to December 20, 2003.